

LOOKING AT THE NEW JERSEY MEADOWLANDS: A HISTORICAL OVERVIEW

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Satellite images and scientific monitoring reports using on-site inspection, sampling and laboratory analysis are the latest manifestation of a centuries-old practice of observing and reporting on the New Jersey Meadowlands. The first sources of information about the Meadowlands were intermittently-published travelers' accounts during the 17th and 18th centuries. The first maps showing any recognizable portions of the Meadowlands were produced during the American Revolution to assist and record military operations. The first maps showing the wetlands' precise boundaries (as well as the routes of the newly-constructed Morris Canal and two railroads) were published in the 1830s and 1840s by public and private mapmakers. Detailed topographical maps were produced several decades later, first by the N.J. Geographical Survey and later by the U.S. Geological Survey. State and federal agencies also later made more detailed maps and studies of the Meadowlands, with the goal of facilitating its "improvement" (i.e., its transformation from wetland into upland). Technological innovations in photography and aviation in the early 1900s led to the development of aerial photographs, a new medium for observing and recording conditions and changes in the Meadowlands. This was supplemented by the development of satellite imaging at the end of the century. The development of video technology also provided another method of observing and recording conditions at the Meadowlands. Until late 1900s, almost all studies and records of the Meadowlands focused upon its physical characteristics (e.g., elevation, boundaries between upland and wetland, and water depth). Growing awareness of the environmental benefits of wetlands and increasing concern over (legal and illegal) waste disposal led to detailed studies and reporting of pollution history and current ecotoxicology of the Meadowlands. Much of this work was institutionalized in a new state agency created in 1969, the Hackensack Meadowlands Development Commission (since 2001, the New Jersey Meadowlands Commission [NJMC]). Most recently, computers have assisted the storage, retrieval and presentation of data about the Meadowlands, via database management systems, Geographic Information Systems (G.I.S), and NJMC websites.

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